

OCT Expanded Clinical Data Analysis

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Vision changes identified in long duration space fliers has led to a more comprehensive clinical monitoring protocol. Optical Coherence Tomography (OCT) was recently implemented on board the International Space Station in 2013. NASA is collaborating with Heidelberg Engineering to expand our current OCT data analysis capability by implementing a volumetric approach. Volumetric maps will be created by combining the circle scan, the disc block scan, and the radial scan. This assessment may provide additional information about the optic nerve and further characterize changes related microgravity exposure. We will discuss challenges with collection and analysis of OCT data, present the results of this reanalysis and outline the potential benefits and limitations of the additional data.